



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor

Robert L. Morgan  
Executive Director

Lowell P. Braxton  
Division Director

1594 West North Temple, Suite 1210

PO Box 145801

Salt Lake City, Utah 84114-5801

(801) 538-5340 telephone


(801) 359-3940 fax

(801) 538-7223 TTY

www.nr.utah.gov

May 19, 2003

TO: Minerals File

FROM: Paul Baker, Senior Reclamation Biologist 

RE: Site Inspection, Staker Paving and Construction, Beck Street Quarry, M/035/019, Salt Lake County, Utah

Date of Inspection: May 6, 2003  
Time of Inspection: about 9:00 to 11:30 AM  
Conditions: Clear, 50's  
Participants: Stuart Ernst and Mike Dalley, Staker; Doug Jensen and Paul Baker, DOGM

**Purpose of Inspection:**

The Division is in the process of reviewing a Notice of Intention to Commence Large Mining Operations, and we wanted to look at the condition of the areas above the quarry, particularly the soils, and also at some purported demonstration benches.

**Observations:**

The plan submitted to Salt Lake City discusses an area where mining was complete and where the operator was going to try final reclamation techniques. Although Mr. Ernst and Mr. Dalley did not seem familiar with the commitment to have demonstration benches, they showed us a highwall with benches where mining is probably complete that they believe to be the area discussed in the plan. This highwall is shown in Photo 1.

The plan indicates soil was to be applied on the benches of this highwall and that they were to be seeded, but it does not appear this happened. Some vegetation has become established naturally, but we were not able to examine it closely and I could not tell from a distance what species were there. Some fines appeared to have eroded or wasted on to the benches from the steep parts of the highwall just above the benches, but as far as we could tell, this appeared to have happened soon after the highwall was created, and it was not an ongoing process.

Toward the north end of this highwall, there is a gully that we later found extends up into Lime Canyon, one of two drainages coming into the mine. At the top of the highwall and gully, there is a water tank apparently fed from a spring, and overflow from the tank was flowing down the gully. We could not see whether the water went all the way to the bottom. Vegetation near the water tank was of

species generally found in wetter areas, but I do not know how much surface flow is natural and how much has been enhanced by water development.

Some of the area above the mine has been previously disturbed but some has not. Near the Bonneville shoreline where the slopes are not too steep, the soils are relatively deep with few rocks and definite development of an A horizon. To the west as the slope becomes steeper, the soils have more coarse fragments and cobbles, and the A horizon is thinner. In the previously disturbed areas, there is a layer of unconsolidated material in which plants are growing. It contains a fair amount of coarse material, probably 40-60 percent.

There are several patches of whitetop (hoary cress) and dyer's woad above the mine although some patches of dyer's woad extend down into the mine pit area. These are both noxious weeds. We also saw some toadflax in these same areas above the mine, and while toadflax is not a declared noxious weed, various weed control agencies actively try to control it.

Photos 2 through 4 were taken from the top of the highwall and show portions of the pit area. In the bottom center of Photo 2 and the lower left corner of Photo 4 is the waste material from gravel cleaning operations.

### **Conclusions and Recommendations:**

I advise the operator to attempt to control the noxious weeds on the property. Considering the difficulty of controlling whitetop, this is not an easy task, but it is likely to save many problems in reclamation and potentially with mining and with use of construction fill from the mine. The Noxious Weed Act says noxious weed propagules, including things like rhizomes and seeds, are not to be moved except under special circumstances. Mining the material in which these plants are growing is definitely included in this category. There have been numerous instances where noxious weeds have been spread in construction fill and similar materials, and this is the reason for the prohibition in the law.

The presence of noxious weeds is a detriment to reclamation. If the operator stockpiles then spreads soil or other growth media that contain noxious weeds, the reclaimed area may not fulfill revegetation requirements.

There is material in previously disturbed areas that can be used as a growth medium, and although this material is not high in organic matter content and probably has low nutrient levels, many wildland species are adapted to this type of situation. In addition, because of the number of coarse fragments, this soil material will be less erodible. The soils in undisturbed areas should be salvaged, but to reduce the amount of erosion, it would be best to keep the soils from steeper areas separate from those in flatter areas.

It takes a little time for loose material on steep portions of the highwall to erode, and as this material collects on the flatter areas like the benches, it would be detrimental to vegetation that was becoming established. I am not certain how to best handle this problem in consideration of the need to spread soil on the benches soon after they are created and to seed as soon as possible after the soil is distributed.

Page 3

Staker Paving and Construction, Beck Street Operation

M/035/019

Inspection Date: May 6, 2003; Report Date: May 19, 2003

The reclamation plan will need to include plans for dealing with the spring and water flow in Lime Canyon. It is possible a riprapped channel might be necessary.

The Division needs to meet with personnel from Salt Lake City to discuss the mining and reclamation plan and to determine the precise status of the plan. The Division has a copy of the plan submitted to the city but also has another plan submitted recently by the operator. These two plans will need to be reconciled since there are differences.

jb

cc: Michael Dalley, Staker & Parsons

Lynn Pace, City Attorney, Salt Lake City – City & County Bldg. 451 S. State, SLC 84111

O:\M035-Salt Lake\M0350019-BeckStreet\inspections\ins-05062003.doc



## ATTACHMENT

### Photographs

**M/035/019, Beck Street Operation, Staker Paving and Construction**

**Inspection Date: May 6, 2003; Report Date: May 19, 2003**



**Photo 1. The highwall where demonstration benches were apparently to have been located.**



**Photo 3. Another view from the top of the highwall.**



**Photo 2. View from the top of the highwall. Fines from the cleaning process are stored at the base of the highwall (lower center of this photo and lower left corner of Photo 4).**



**Photo 4. Another view of the facilities from the top of the highwall.**